

Claims

1. A capacitive sensor (1) with a first electrode (2) and a second electrode (3), which are spaced apart from one another and which form a measurement capacitance, such that the first electrode (2) is situated on a first substrate body (4) and the second electrode (3) on a second substrate body (5), and the second substrate body (5) is designed as a deformable membrane in the vicinity of the second electrode (3), characterized in that a magnetic body (6) is disposed in the vicinity of the second electrode (3) and the membrane, which magnetic body is connected to the membrane and to the second electrode (3) in such a way that a change of position of the magnetic body (6), induced by an external magnetic field, will cause a change of position of the second electrode (3) via the membrane, resulting in a capacitance change.
2. The capacitive sensor of Claim 1, characterized in that the second electrode (3) and the magnetic body (6) are situated on opposite sides of the membrane.
3. The capacitive sensor of one of the preceding claims, characterized in that the magnetic body (6) is formed as a thin layer.
4. The capacitive sensor of one of the preceding claims, characterized in that the magnetic body (6) contains ferromagnetic material.
5. The capacitive sensor of one of the preceding claims, characterized in that an electronic arrangement for processing the measurement signals is integrated into at least one of the substrate bodies (4, 5).

6. The capacitive sensor of Claim 5, characterized in that the electronic arrangement for processing the measurement signals is situated in the first substrate body below the electrode affixed thereon.
7. The capacitive sensor of Claim 5, characterized in that a first part of the electronic arrangement for processing the measurement signals is situated in the first substrate body (4) and a second part of the electronic arrangement for processing the measurement signals is situated in the second substrate body (5).
8. The capacitive sensor of one of the Claims 5 to 7, characterized in that the electronic arrangement for processing the measurement signals has elements to amplify the signal.
9. The capacitive sensor of one of the Claims 5 to 8, characterized in that the electronic arrangement for processing the measurement signals has elements for actuating the signal.
10. The capacitive sensor of one of the Claims 5 to 9, characterized in that at least one of the electrodes is formed as one or more conductor tracks.
11. The capacitive sensor of Claim 10, characterized in that the conductor track is part of the electronic arrangement for processing the measurement signals.
12. The capacitive sensor of one of the preceding claims, characterized in that at least one electrode (2, 3) has a spatial structure for a space-resolving measurement.

- [illegible]